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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,754	07/24/2003	Rhodri Wyn Evans	9092-407CT	1718
20792	7590	09/30/2005	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			WILLS, MONIQUE M	
			ART UNIT	PAPER NUMBER
			1746	
DATE MAILED: 09/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/626,754

Applicant(s)

EVANS ET AL.

Examiner

Monique M. Wills

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/24/03 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/24/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION*****Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 20-27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 9, 14, 16, 17 & 19 of U.S. Patent No. 6,602,638. Although the conflicting claims are not identical, they are not patentably distinct from each other because they contain common subject matter as follows:

Claim 1 embraces instant claims 20 & 21 by necessitating: a battery comprising positive and negative plates, two connecting straps (3), one connected to the positive plates and the other to the negative plates, the plates and straps (3) being enclosed in a box (1) with a lid (2), and two terminals (4), each one projecting from a respective connecting strap (3) through a respective aperture in the lid (2), characterized by further comprising two zones (7) on the underside of the lid (2), each one surrounding one of

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the two apertures and facing an upper surface (8) of the respective strap (3), two compressible seals (10) each one surrounding a respective aperture and being compressibly located between the respective zone (7) and the facing upper surface (8) of the strap (3), and two spaces each one being defined around a respective terminal interiorly of the respective aperture, each space containing settable material in a set condition, wherein each seal is contained within a groove that surrounds the respective aperture, and wherein the groove is formed wholly in the upper surface of the strap. The "respective zone" of '638 is equivalent to the instant "annular sealing surface" of the lid. The respective zone provides a parallel wall to abut the sealing material. The "box" of '638 is equivalent to the instant "container".

Claim 14 embraces instant claims 20, 21 & 27 by necessitating: a battery comprising positive and negative plates, two connecting straps (3), one connected to the positive plates and the other to the negative plates, the plates and straps (3) being enclosed in a box (1) with a lid (2), and two terminals (4), each one projecting from a respective connecting strap (3) through a respective aperture in the lid (2), characterized by further comprising two zones (7) on the underside of the lid (2), each one surrounding one of the two apertures and facing an upper surface (8) of the respective strap (3), two compressible seals (10) each one surrounding a respective aperture and being compressibly located between the respective zone (7) and the facing upper surface (8) of the strap (3), and two spaces each one being defined around a respective terminal interiorly of the respective aperture, each space containing settable material in a set condition, wherein each seal is contained within a groove which surrounds the

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respective aperture, and the groove is formed partly in the zone and partly in the upper surface of the strap. The "respective zone" of '638 is equivalent to the instant "annular sealing surface" of the lid. The respective zone provides a parallel wall to abut the sealing material. The "box" of '638 is equivalent to the instant "container".

Claims 1, 6 & 9 embrace instant claims 20 & 22 by necessitating: a sealing surface with a channel in the lid. The "channel" of '638 is equivalent to the instant "groove", both are recesses that accommodate sealing material.

Claim 1 embraces instant claim 23 by necessitating: a battery comprising positive and negative plates, two connecting straps (3), one connected to the positive plates and the other to the negative plates, the plates and straps (3) being enclosed in a box (1) with a lid (2), and two terminals (4), each one projecting from a respective connecting strap (3) through a respective aperture in the lid (2), characterized by further comprising two zones (7) on the underside of the lid (2), each one surrounding one of the two apertures and facing an upper surface (8) of the respective strap (3), two compressible seals (10) each one surrounding a respective aperture and being compressibly located between the respective zone (7) and the facing upper surface (8) of the strap (3), and two spaces each one being defined around a respective terminal interiorly of the respective aperture, each space containing settable material in a set condition, wherein each seal is contained within a groove that surrounds the respective aperture, and wherein the groove is formed wholly in the upper surface of the strap.

'638 is does not expressly disclose a protrusion on the annular sealing surface.

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However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ a protrusion to provide a compressive force that increases the seal.

Claims 1 & 9 embrace instant claim 24 by necessitating: that the apertures are each positioned at the base (6) of a respective recess (5) formed in the lid (2) and the retaining means (15) is positioned wholly within the recess (15). The "recess" of '638 is equivalent to the instant depression. With respect to the retainer exerting a downward force on the base, claim 1 requires that the apertures are positioned in the base, wherein the apertures are compressibly located between the respective zone and the facing upper surface.

Claims 14 & 16 embrace instant claims 24 & 26 by necessitating: that each of the apertures is positioned in the base of a respective recess formed in the lid, further comprising retaining means for each terminal that ensures that the upper surface of the respective strap and the respective zone remain in contact and that the compression of the seal is maintained, the retaining means being positioned wholly within the recess. The "recess" of '638 is equivalent to the instant depression. With respect to the retainer exerting a downward force on the base, claim 14 requires that the apertures are positioned in the base, wherein the apertures are compressibly located between the respective zone and the facing upper surface.

Claims 17 & 19 embrace instant claim 25 by necessitating: a battery comprising positive and negative plates, two connecting straps (3), one connected to the positive

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plates and the other to the negative plates, the plates and straps (3) being enclosed in a box (1) with a lid (2), and two terminals (4), each one projecting from a respective connecting strap (3) through a respective aperture in the lid (2), characterised by further comprising two zones (7) on the underside of the lid (2), each one surrounding one of the two apertures and facing an upper surface (8) of the respective strap (3), two compressible seals (10) each one surrounding a respective aperture and being compressibly located between the respective zone (7) and the facing upper surface (8) of the strap (3), and two spaces each one being defined around a respective terminal interiorly of the respective aperture, each space containing settable material in a set condition, and further comprising retaining means for each terminal which ensures that the upper surface of the respective strap and the respective zone remain in contact and that the compression of the seal is maintained, and wherein the retaining means comprises a screw-threaded collar positioned on an externally screw-threaded portion of the respective terminal, a lower part of the collar contacting a region of the lid above the zone. Furthermore, that the claims '638 require that the apertures are positioned in the base of a respective recess formed in the lid, and each collar is positioned wholly within the recess.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Hooke U.S. Patent 5,380,603.

With respect to claims 20 & 26, Hooke teaches a battery comprising 10 comprising: a plurality of positive and negative plates (14 & 16); a first strap (22) sealed to the positive plates; a second strap (22) sealed to the negative plates; a first terminal (48) electrically connected to the first strap; a second terminal (41) electrically connected to the second strap; the first strap comprises an annular sealing groove (51) about its respective associated terminal; a container (26); a lid (28) sealed to said container, the first and second straps and positive and negative plates being disposed within the sealed lid and container (Fig. 2), said lid (28) has first and second apertures (40), the first and second terminals (48) protrudes through said first and second apertures (40), the lid (28) further comprises an annular sealing surface (51); and at least one compliant seal (56) disposed about said annular sealing surface (51). With respect to claim 21, the outside wall of the sealing groove (51) is parallel to the inside surface. See Figure 1. As to claim 22, the annular sealing surface comprises a groove (51) in the lid. 24. With respect to claim 24, the lid (28) further comprises at least one depression (42) comprising a base, one of said first or second apertures being disposed in said base, and a retainer (52) disposed about and engagable with at least



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one of the terminals. As to claim 25, the retainer (52) has an internally threaded collar (49). The terminal is a screw thread that tightens to exert force on the base. See Figure 1.

Hooke is silent to a groove in the straps circumscribing the terminals (claim 20) and a protrusion in the annular sealing surface (claim 23).

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ the groove in the straps circumscribing the terminals, in order to increase structural integrity of the seal between the strap and the lid.

With respect to claim 23, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ a protrusion in the annular sealing surface to increase compression around the terminal improving seal strength.

As to claim 27, the arrangement of Hooke satisfies the instant claim where the groove (51) forms part of the aperture surrounding the terminal. The sealing material is placed in the space of the aperture to provide a seal between the aperture and terminal.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-

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1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Barr, may be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

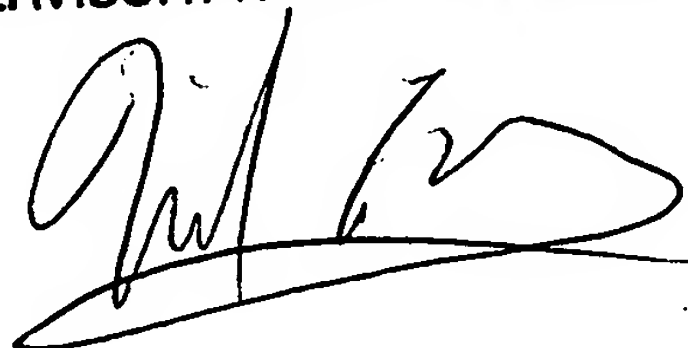
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MW

9/12/05

**MICHAEL BARR**  
**SUPERVISORY PATENT EXAMINER**

A handwritten signature in black ink, appearing to read 'Michael Barr', is written over a horizontal line.